

An apparatus and method for performing parallel distributed processing are disclosed. A plurality of nodes are connected with weight connections. The weight connections are updated based on a likelihood function of the associated nodes. Also, inputs to nodes are aggregated using t-norm or t-conorm functions, with outputs representing the possibility and belief measures. The aggregation methods presented offer an improvement over many other classification methods. Because of the form of the output, additional data evidence, including additional attributes, may be taken into account to improve classification without retraining the original data.